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JACG

THE JERSEY ATARI COMPUTER GROUP

BBS/HOTLINE
201-298-0161

EDITORIAL

APOLOGY...As you peruse this Newsletter, you will obviously notice a difference. The short of it is that the club treasury has dwindled to a level that simply will not support PRINTING of the Newsletter. In fact, the treasury will not even support the professional duplication of the Newsletter. For the next two or three months the Newsletter will essentially be in the format that you are now viewing. After that (provided that the treasury has regained a modicum of health), the Newsletter will be duplicated professionally. If and when the treasury regains complete health, we may be able to go back to a printed Newsletter...although the membership may find the professionally duplicated product of essentially the same quality. I have seen such that rivals printing...for a fraction of the cost. But all that in future; for now, what you see is what you will get.

Why the apology? Well, as a member of the Executive Committee, I should have been aware of the declining status of the treasury; and, as Newsletter Editor, I should have insisted that a four-line Treasurer's Report (Starting and Ending Balances, income and expenses) be a part of each and every Newsletter...it will be from now on...or the Newsletter will not go to press. It is obvious (at least to me) that if a monthly accounting had been available to all...events would not have come to this.

I put a great deal of effort into each month's Newsletter, as do those who contribute to it, and as do the advertisers. I do not want to see all of that effort at least in part neutered by a photo-copied, in-professional product (and I don't mean to belittle at ill the effort that a very generous individual has donated n order to get this issue produced). I continue on, noving that, as a minimum, in a couple of months time, we an at least get a professionally produced (even though photo-copied) Newsletter with a few little "extras" that will add dignity to something that I think the JACG can continue to take pride in. If the Newsletter were to remain essentially as this issue is, I do not think that I could continue to justify to myself the amount of time that I spend preparing it...Hopefully however, we can look to these next couple of months as nothing more than a necessary pause. Needless to say, I believe that there should be NO major expenses by the club until we are back on track with the Newsletter. That is my personal opinion, but one that I hope is shared by the majority. I do not want to see a continued impoverishment of the Newsletter for any longer than necessary.

IN THIS ISSUE

MARK YOUR CALENDAR !!
JACG
Meeting Schedule

MARCH 14, 1987

EFFECTIVE 1/13/87

ATARI ST COMPUTER SYSTEMS

POWER WITHOUT THE PRICE

OVER-THE-COUNTER EXCHANGE
ON DOA DEFECTS
NINETY-DAY ATARI WARRANTY

**68000 PROCESSOR — 8MHZ CLOCK — MIDI INTERFACE
SERIAL & PARALLEL PORTS — TOS OPERATING SYSTEM
WITH GEM — 640X400 MONO RES — 512 COLORS
640X200 COLOR RES**

FREE
WITH SYSTEM PURCHASE-
BASIC LANGUAGE

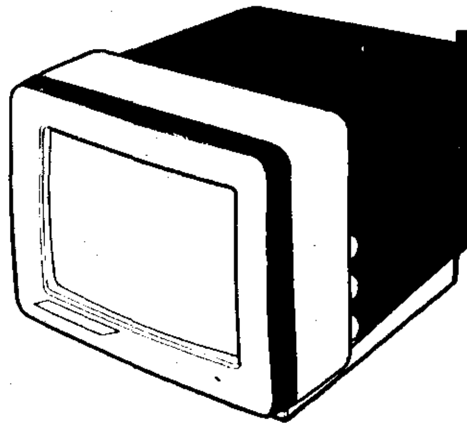
520ST 512K RAM CPU WITH

WITH MOUSE CONTROLLER AND TV OUTPUT

MONO SYSTEM $499.95

COLOR SYSTEM $699.95

SYSTEM CONSISTS OF:
520ST CPU WITH MOUSE,
SF354 SS, DD DISK DRIVE &
SM124 MONO MONITOR OR
SC1224 COLOR MONITOR



1040ST 1.024 MEG RAM

***WITH MOUSE CONTROLLER & BUILT-IN
DS, DD 3.5" DISK DRIVE***

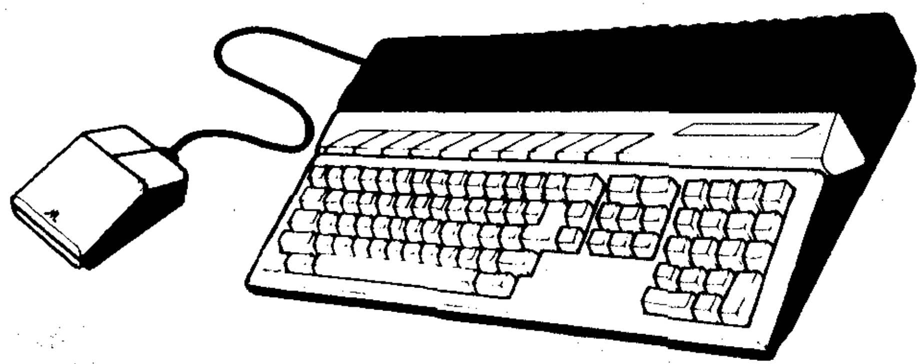
MONO SYSTEM $699.95

COLOR SYSTEM $899.95

SYSTEM CONSISTS OF:
1040ST CPU WITH BUILT-IN
DS, DD DISK DRIVE & MOUSE
SM124 MONO MONITOR OR
SC1224 COLOR MONITOR

SHD204 20 MEG HARD DRIVE	574.95
SF354 SS, DD DISK DRIVE	149.95
SF314 DS, DD DISK DRIVE	209.95
SM124 MONO MONITOR	159.95
SC1224 COLOR MONITOR	319.95
SMM804 DM PRINTER w/cable	189.95
SX212 300/1200 MODEM	89.95

***SUBSTITUTE SF314 FOR SF354
IN 520 ST PACKAGE — ADD*** $69.95



GEMINI ENTERPRISES

**86 RIDGEDALE AVENUE
CEDAR KNOLLS, NJ 07927** **267-0988**

YOUR ATARI CONNECTION

PDG

Doug Van Hook - JACG

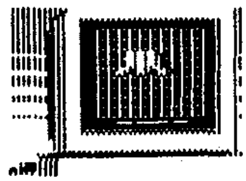
EXTRA !! EXTRA !! JACG has its own Print Shop Picture Disk! This month I rolled up my shirt sleeves and volunteered for work on the JACG production line. Sam Cory suggested that we do something with all these fantastic picture disks which have been sent to us from Atari users in Germany. Despite the fact that Print Shop can not do these pictures justice, I felt the club could use its own Print Shop Disk in our library. The disk has 21 pictures on one side, and 28 on the other. Oh... The pictures were converted with ANTIC Magazine's Graphic Shop. The Rotated and Compressed pictures shown here were done with Tom Pazel's Print Shop Utility, JACG disk library #81. This program was also used to convert the pictures to Visualizer format for demonstration at the JACG monthly meeting. If a picture is worth 1000 words, I'll have written 49,000 words this month. Since I don't want to be long winded, I'll just print out some of these great pictures.



MAN



SKYLINE



MONITOR



SPYVSSPY



ATARI



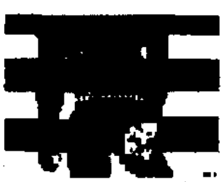
ENTERPRISE



PSYCHO



THINKING



BRUCE



FACE



SHORLINE



TREEMEN



CAT



FIGHTER



DRAGON



GADGET


GHOST


KHAN


NIXON


HONDA


HAPPY


KIRK


PALMTREE


HORSE


HITCHHIK


KISS


SPOCK


IRENE


KEYPUNCH


KLINGON


SHIELD


KATZE


AIRPLANE


CAT


EYE


GARF5

Proposed Changes to JACG Bylaws

Joseph S. Kennedy - JACG

The following are the Bylaws changes as proposed by the JACG Executive Board to make certain that all members of the Group are now and in the future fully represented. This is effected by having two vice-presidents one for 8-bit users and one for 16-bit users. These changes will be voted on at the February meeting. The original bylaws are available in the February 1985 issue of the JACG newsletter and will be published soon for all newer members in their entirety.

Article IV -> Article V

Corrects a typo.

Article V

Section 1 Elected Officers

Elected officers of the JACG shall be President, Vice President - 8 bit, Vice President - 16 bit, Secretary and Treasurer.

Section 2 Appointed Officers

Appointed officers of the JACG shall be Librarian, Newsletter Editor and Advertising Manager.

Article VI

Section 3 Vice President - 8 & 16 bit

a) in the event of the temporary absence of the President the available members of the Executive Board shall select which Vice President will assume the duties of the President.

b) in the event of the early termination of a President's term of office, the Executive Board shall meet in an official session to determine which Vice President shall serve the remainder of the term of office as President.

c) be responsible jointly for the meeting place for the regular JACG meeting and its preparation.

d) be responsible for the meeting content with not just their individual constituencies in mind but also the benefit of the JACG as a whole.

Section 4 Secretary

d) keep the membership rolls of the JACG.

Section 5 Treasurer

Eliminate a) and reletter the remainder a) - d).

Section 7 Program Chairman

Eliminate the position of Program Chairperson as these duties are now in the hands of the Vice Presidents. Renumber Sections 8 & 9 as Sections 7 & 8 respectively.

Tax Season is Here

by Shree Vandenberg-Treasurer/JACG

The tax season is here once again and there are not many programs on the market that will handle all of your needs.

About 6 months ago, I saw an article in COMPUTE Magazine about a tax program for the Atari. At first I was confused with the name "TEXAS TAXES FOR THE ATARI" but when I obtained and loaded the program I was impressed with its' simplicity.

Steven Karasek is a wonderful programer and he has at his disposal the latest information on taxes and his father is a professional tax preparer. This program a joy to use because It only takes 10 to 15 minutes to learn. This is important because many of you wait till the very last minute to start your taxes.

The program includes the following forms and schedules :

1040:Long Form
1040a:Short Form

Schedules

A:Deductions
B:interest
C:Business (P/L from business or profession)
D:Capital gain and losses
E:Supplement Income
SE:Self-employment
W:Married couple
G:Income Average

FORMS:

2106:Employment & Business
2441:Dependent Care

The schedules that it doesn't have are:

6251:Alt.Min tax
4868:Application for auto extension
4562:Depreciation & Amortization

The program opens with the choices: Init, 1040 and Consistent
The Init is always used first , when you boot the program up.This section ask questions that the 1040 form uses in the beginning.For example;
Number of dependents
Filing status
exemption
Capital gains distributions
output file

You should do all the first before doing the 1040 form since a lot of the figures depend on these calculations to do the 1040 /1040a form.

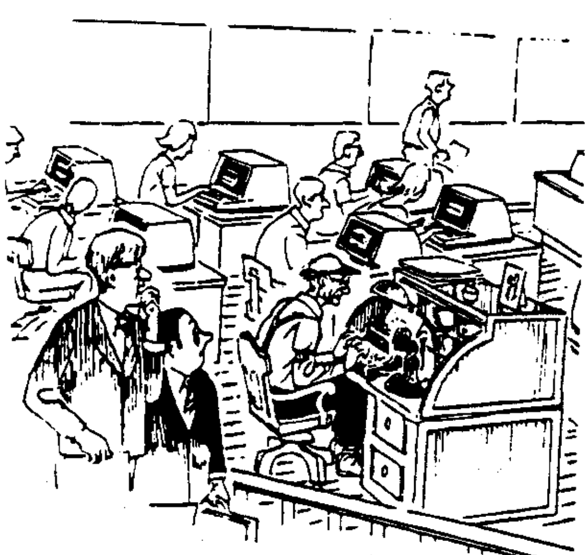
Each form works like a spreadsheet. It has a built in calculator as well. There will be two types of print out, one draft form ,the other an IRS format. The IRS format can be used for all supporting schedules .

There are updates each year for only $10.00 plus $1.00 for postage and handling. This price is considerably less than the updates for Tax Advantage.

Now comes the best part, the price of the intial program $19.95 + $2.00 shipping and handling.
send all request to:
Steve Karasek
855 Diversey
St.Louis,MO 63126
(314)961-2052

This program is also written for Apple, IBM, C64, C128, Plus/4, TI99/4A.

- - - - - - - -



"But we can't phase him out! He's the only one who can spell."

JACG Hall Of Fame Games

Don MacLeay-JACG

The results are in and I would like to thank all those who filled in a ballot.

```
****************************
*                          *
* JACG Hall of Fame Games  *
*                          *
*     Early Cartridges     *
*                          *
*                          *
*     Star Raiders         *
*     Pac-Man              *
*     Missile Command      *
*     Centipeed            *
*     Q-Bert               *
*     Space Invaders       *
*     Defender             *
*                          *
****************************
```

The above ROM cartridge games are all from Atari and if you're new to the 8-bit world, or just missed them the first time around, they are available at bargain prices (while supplies last!).

In an effort to provide a larger playfield or multiple playfields the later cartridges were increased to 16k-this month's ballot includes many of these. I'm changing the voting to choosing up to five titles (1-5) with your favorite as the number 1.

JACG Hall of Fame Games
Ballot #2

The Later Cartridges

...Caverns of Mars
...Dig Dug
...Soccer
...Football
...E.T. Phone Home
...Donkey Kong
...Robotron 2084
...Pole Position
...Eastern Front
...Tennis
...Ms. PacMan
...Joust
...Pengo
...Moon Patrol
...B.C.'s Quest for Tires
...Megamania
...Basketball
...Pitfall
...Pitfall 2
...Track and Field
...Submarine Commander,EMI
...Major League Hockey,EMI
...Jumbo Jet, EMI
...Protector,Synapse

PARALLEL PROCESSING

Donald Forbes - JACG

Want to try out parallel processing on your own? Here is an easy way to get started.

Parallel processing is the hot topic in computer architectures today. The fastest way to speed up processing is to hook up multiple computers to run simultaneously. Everybody knows that Twenty Mule Team Borax is better than generic borax, and it ought to be only a short while before the Twenty Mule Team PC with parallel processing and multiprocessing should be with us.

Last May, Thinking Machines Corp. of Cambridge Mass. had orders for six machines (priced at $1 to $3 million) that do parallel processing at a billion (yes, billion) instructions per second. The orders are from Yale, Perkin-Elmer, MIT and the Defense Department.

For a simulation of parallel processing you only need a spreadsheet, such as SynCalc for the Atari that I bought at the flea market last year for $21.

There is a standard engineering problem that requires you to compute the temperature on the inside of a metal plate if you know the temperature at each point on the edges. This problem is the model for many other engineering uses (turbulence, flow in a network, and so forth).

Let us pretend we have a small square plate and know the temperatures at the corners and the midpoints of the four edges, and want to find the temperature at the center node:

76	76	76
78		78
80	80	80

It should be obvious that the temperature at the center should be 78 degrees, but let us set up a spreadsheet to compute the answer. The most simple way to find the answer, of course, is to take the average of the temperatures at the four midpoints (76, 78, 78, and 80) which naturally gives 78 degrees. If you think about it, there are several ways to compute the temperature at the center node. We could take the average of the eight surrounding nodes. Or we could give a higher weight to the four nearest nodes and a lesser weight to the four corner nodes because they are at a slightly greater distance. Or you might think of some even more sophisticated scheme.

On the spreadsheet the simple scheme would look like this:

	A	B	C
1	76	76	76
2	78	?	78
3	80	80	80

The formula in B2 would be
(B1+A2+C2+B3)/4
for the four nodes, and
(A1+B1+C1+A2+C2+A3+B3+C3)/8
for the eight nodes.

If we hit the START key to recalculate the answer in B2 we get a temperature of 78 degrees on the first try.

Now let us try the same problem with four interior nodes, and the four-star estimation formula, as follows:

	A	B	C	D
1	76	76	76	76
2	77	?	?	77
3	78	?	?	78
4	79	?	?	79
5	80	80	80	80

This time we can create the formula (B1+A2+C2+B3)/4 for the first node and copy the formula for the other nodes, which will start out with a default value of zero. We will have to hit the recalc key several times before we get a final unvarying answer.

Now set the values to two digits after the decimal point and watch the changes each time you recalculate.

The method works, so we can try it on a larger scale. Set up a sixteen by sixteen spreadsheet running from cell A1 to P16 with temperatures of 65 degrees in the first row and increasing at the edges by one degree at a time to 80 degrees in the last row, with two digits after the decimal point.

Here is where the fun starts. Plug in a high (or low) temperature at one of the interiór nodes and watch the new heat distribution. Or plug in an extreme temperature at one of the edge points, and note the effect. This technique is older than the electronic computer -- it dates back to 1935 and has many uses in physics problems. For details see BYTE Jan 87 page 111.

If we had true parallel processing, then we would have one computer handling the calculation at each node for each computing cycle. We would also have to establish a network so that all the invidual computers would be acting in concert.

In the days when Johnny von Neumann helped create the early computers, memory was expensive. Today memory is

cheap, and computer architects are worried about what they call the von Neumann bottleneck -- access to memory is funnelled through the CPU, which keeps the CPU racing furiously while much of memory sits idle.

```
           +--------+
           | Memory |
           +--------+
             A    |
             |    v
           +--------+
           |        |
Input -->  |  CPU   | --> Output
           |        |
           +--------+
```

The solution: multiple CPUs controlled by a network and talking to memory at the same time.

The computer built by Thinking Machines has 65536 processors (two to the sixteenth power) and the physical three-dimensional connecting network is logically a sixteen-dimensional cube, according to the NY Times Magazine of Dec 7. Therefore, each processor is directly connected to 16 others, but is also never more than 16 steps away from any other processor in the computer.

The National Science Foundation has launched a supercomputer program designed to make supercomputers available to researchers in all scientific disciplines, according to the Jan 87 Notices of the American Mathematical Society.

"The term supercomputer refers to computers that use two architectures not found in conventional computers.

"First, supercomputers use vector architecture or 'pipelining,' which can be understood as follows. Suppose a vector of data is given to a computer, and an instruction is to be performed on each component of the vector. A conventional 'serial' computer would perform the entire instruction on each component in turn. But with pipelining, the instruction is broken into a sequence of shorter steps which can be performed simultaneously on different components of the vector, so that the instruction is executed more efficiently. In this way, pipelining is analogous to an assembly line. Pipelining is sometimes called SIMD (single instruction, multiple data) architecture, as opposed to the 'serial' architecture of conventional computers, which is called SISD (single instruction, single data).

"Second, supercomputers utilize aspects of MIMD (multiple instruction, multiple data) architecture, which, when compared to a serial computer, is analogous to having several assembly lines that can build different objects. An array of processors accepts vectors of data with each processor performing different instructions.

"With these architectures, supercomputers are ideally suited to engineering and science applications, for they perform optimally on tasks requiring a few calculations on a large amount of data, or a complex series of calculations on a smaller set of preformatted numbers.

"In 1978, Cray Research introduced the first 'vector' machine, the Cray I, which performed roughly 10 times faster than the fastest machine before it. Control Data Corp. introduced the Cyber 205 in 1981, and since then Cray and CDC have dominated the supercomputer market ... One of IBM's ventures is a joint marketing agreement to sell FPS-164 array processors attached to an IBM host computer.

"But the cost of a supercomputer, at $5-$20 million, has caused many to turn instead to concurrent or parallel processors, which are similar in concept to supercomputers. They consist of collections of powerful microprocessors that can work in concert on different parts of a single task. Concurrent processors are financially attractive because they are cheaper than supercomputers ($200,000 - $1.5 million), and because additional microprocessors can be added to upgrade the system at a relatively low cost. They are generally slower than supercomputers, and there are many problems associated with them, such as coordinating the functions of the individual microprocessors and controlling the flow of data between them. But these are just the sorts of problems future supercomputers will pose -- for most experts agree that parallel computing is the way of the future.

"Researchers in many fields are finding supercomputers indispensable to their work ... Astrophysicists have created a new branch of their field called numerical relativity in which supercomputers model, for example, dust and gas spiraling into a black hole ... By modeling cold viruses, the propagation of cracks in metals, weather patterns, and even neurons in the brain, researchers have been able ... to gain new understanding.

"Mathematicians have begun to explore the possible roles for computers ... As Stuart Geman of Brown University observed: It's far easier to prove a difficult theorem if you known it's true.

"Charles Peskin has recently used computer graphics to create a two-dimensional model of a human heart in order to improve the design of artificial heart valves ...

"Oil and aerospace companies and goverment sponsored national laboratories began using supercomputers in the late 1970s ... In 1984 the National Science Foundation launched a $200 million, five-year plan to make supercomputers available to academic researchers in all scientific disciplines ... Contact John W. D. Connolly, Room 533, NSF, 1800 G St NW, Washington DC 20550, (202) 357-7758."

FROM THE EXCHANGE

by R.P. MULHEARN JR - JACG

THIS MONTH'S MAILBOX BROUGHT A VIRTUAL BLIZZARD OF NOTABLE ARTICLES. OF COURSE, ALL OF THE EXCHANGE NEWSLETTERS ARE AVAIBLE FOR MEMBERS TO CHECK OUT BOTH BEFORE AND AFTER THE MEETING IN THE LOBBY. YOU MAY CHECK OUT AS MANY FOLDERS AS YOU FEEL YOU CAN READ IN A MONTH. YOU CAN EVEN RESERVE YOUR SELECTION ANYTIME PRIOR TO THE MEETING. REMEMBER, THE ONLY STIPULATION IS THAT YOU MUST RETURN IT AT THE NEXT MEETING OR PRIOR IF YOU CANNOT MAKE THAT MEETING.

PAGE 6 NOV/DEC SPEED CHECK PROGRAM;ENGLAND'S PCW SHOW;ST FLOPPY DISK TUTORIAL

POKEY OCT ACTION TUTORIAL;ST PASCAL TUTORIAL;DELPHI REVIEW

PORTLAND ATARI CLUB NOV PERFECT RATIOS WITH DRAWING IN BASIC

PACE WORLD NOV FX80 UPGRADE;AW+ RAMDISK CONVERSION

APL ATARI USERS GROUP NOV ST PRINTER DRIVERS FOR 1ST WORD

ICEBERG NOV BILL WILKINSON TECH NOTES

NEUTRON NOV ST RAMDISK

ORNJUICE NOV ST TRICKS AND SHORTCUTS

ST EXCHANGE NOV ALL ST

MOM DEC READ MAC DISK DIRECTLY ON ST;PEEKS AND POKES 8 BIT

R I ACE REPORTER NOV PASCAL PROGAMMING;DATA COMMUNICATIONS AND COMPUTERS

CLEVATARI NOV STRUCTURED PROGRAMMING IN TURBO BASIC

PAGE 6 CALTARI VOL 4/7 SCREEN DUMP 1029

AUSTRALIAN GAZETTE NOV ALTERING ST BASIC EDITOR GHOST TEXT

WAND NOV COLOR DUMP;RAMDISK AND AW+

STATUS NOV SOLID STATE RING DETECTOR 835/1030

SNACC NOV AVATEX 300/1200 MODEM

CINTARI DEC ADD A 5" DRIVE TO YOUR ST

MVACE DEC USING CPM-80 ON THE ST

HACE OCT ALTERNATIVE DOS STYLES

ATARI EXCHANGE OF LOUISVILLE NOV ATARI 8 BIT DRIVES

SBACE NOV 5" DRIVES ON THE ST THE GOOD AND BAD

NYBBLES&BYTES NOV WINDOW PROGRAMN;DISK ERROR TROUBLESHOOTING

ACE-STL NOV ST SHRINK BOX ROUTIENS;ICD-MIO BOARD A REVIEW

FEEDBACK OCT MACHINE LANGUAGE TUTORIAL;ST ADDS FROM AROUND THE WORLD

TRI-COUNTY ATARI USERS GROUP DEC 8 & 16 BIT BOOKS,AUTHORS AND PUBLISHERS

POKEY PRESS NOV 3D ART ON THE ST

NOISE from NOYES

D.B. Noyes - JACG

Now that the holiday season has gone - along with most of our hard earned $$$; and now that the IRS and the myriad credit cards are after what is left - what better time than now to invest in SOFTWARE! "What", you say, "Has Noyes lost control of his senses, is he out of touch with reality?" Well, no fear - I'm still in reasonable charge of my faculties. It's just that I do tend to keep my eyes open for bargains. Lately I have made several trips to GEMINI, a major advertiser in our Newsletter, and for the past few weeks there have been baskets and baskets of bargain priced software available for purchase. The prices vary - I've been partial to the five for $10.00 basket myself. In fact, I made three forays into it in the space of one week! Of course there are more expensive baskets - 3 for $10.00, and various other pricing. Single purchases can also be made - but I went for the volume purchases. Not to be the last of the small-time spenders - I shelled out $9.95 for The Serpent's Star!!! Who ever said that Dave Noyes was cheap!

Those were the bargain baskets, but have you been watching the price of software lately? The prices have gone down, and more "bundled" products are coming out. Top Gun by MicroProse and the Access package with both Beachheads and Raid on Moscow come to mind. Either disk is less than the price of any one of the items on it. And blank disks? Bonus brand for half of what I paid for them just a few short months ago!

So what's the point. Well you can still go broke buying the bargains and saving money - but at least you can end up with more to show for it now than at any time before!

'til next month and more NOISE!

J.A.C.G.
EXECUTIVE MEETING MINUTES

R.P. MULHEARN - JACG

THE MEETING WAS CALLED TO ORDER BY JOE KENNEDY ON 01/30/87 AT 8:15PM WITH JOE KENNEDY,BOB MULHEARN,SHREE VANDENBERG,DAVE NOYES,SAM CORY, AND GARY GORSKI PRESENT.A QUORUM AS STIPULATED IN THE BYLAWS WAS PRESENT. THE LIBRARIAN STATED THAT THE CPM EMULATOR FOR THE ST WOULD SOON BE AVAIBLE TO MEMBERS. AS CPM IS AVAIBLE NORMALLY ON 8" OR 5" DISKS AND NOT 3" FORMAT OF THE ST,IT WAS DISCUSSED AND APPROVED THAT THE DISK LIBRARIAN (ST) WOULD EXPLORE THE 5" CPM DISK FORMAT FOR POSSIBLE COMPATABILITY AND ACCESS TO THE LARGE CPM PUBLIC DOMAIN LIBRARY FOR MEMBERS. FURTHER VERSION 1.7 OF ST WRITER IS IN THE LIBRARY AND WOULD BE DISK OF THE MONTH IN FEBRUARY. THE MILBURN PUBLIC LIBRARY HAS APPROACHED THE CLUB REGARDING THE PURCHASE OF LIBRARY DISKS WITH THIER LIMITED BUDGET. AFTER DISCUSSION IT WAS AGREED THAT A LIMITED NUMBER OF DISKS PER YEAR WOULD BE OFFERED AT A REDUCED PRICE OF $1.00 PROVIDED THAT THE CLUB RECEIVES FULL CREDIT AND OUR MEMBERSHIP BROCHURES ARE MADE AVAIBLE TO THE PUBLIC. NO LIMIT WAS PLACED ON THE NUMBER OF DISKS THAT COULD BE PURCHASED AT NORMAL PRICE.

THE PRESIDENT, TAKING INTO ACCOUNT THE CHANGING NATURE OF THE CLUB, RECOMMENDED CHANGES TO THE BYLAWS WHICH, AFTER DISCUSSION, PASSED WITHOUT DISSENT. THE FOLLOWING PROPOSALS WILL BE PUBLISHED IN THE FEBRUARY NEWSLETTER FOR DISCUSSION AND VOTE BY THE FULL MEMBERSHIP PRESENT AT THAT MEETING.

PROPOSED CHANGES TO THE JACG BYLAWS: 2ND ARTICLE IV RENUMBERED TO ARTICLE V(CORRECTS A TYPO); ARTICLE V SECTION 1 ELECTED OFFICERS---ELECTED OFFICERS OF THE JACG SHALL BE PRESIDENT, VICE PRESIDENT-8 BIT, VICE PRESIDENT-16 BIT, SECRETARY AND TREASURER. SECTION 2 APPOINTED OFFICERS---APPOINTED OFFICERS OF THE JACG SHALL BE LIBRARIAN, NEWSLETTER EDITOR AND ADVERTISING MANAGER. ARTICLE VI SECTION 3 VICE PRESIDENT-8 & 16 BIT. a) IN THE EVENT OF THE TEMPORARY ABSENCE OF THE PRESIDENT,THE AVAILABLE MEMBERS OF THE EXECUTIVE BOARD SHALL SELECT WHICH VICE PRESIDENT WILL ASSUME THE DUTIES OF THE PRESIDENT. b)IN THE EVENT OF THE EARLY TERMINATION OF A PRESIDENT'S TERM OF OFFICE, THE EXECUTIVE BOARD SHALL MEET IN AN OFFICIAL SESSION TO DETERMINE WHICH VICE- PRESIDENT SHALL SERVE THE REMAINDER OF THE TERM OF THE OFFICE AS PRESIDENT. c) BE RESPONSIBLE JOINTLY FOR THE MEETING PLACE FOR THE REGULAR JACG MEETING AND ITS PREPARATION. d)BE RESPONSIBLE FOR THE MEETING CONTENT WITH NOT JUST THEIR INDIVIDUAL CONSTITUENCIES IN MIND BUT ALSO THE BENIFIT OF THE JACG AS A WHOLE. SECTION 4 SECRETARY--- d)KEEP THE MEMBERSHIP ROLLS OF THE JACG. SECTION 5 TREASURER---ELIMINATE a) AND RELETTER THE REMAINDER a)-d). SECTION 7 PROGRAM CHAIRMAN--- ELIMINATE THE POSITION OF PROGRAM CHAIRPERSON AS THESE DUTIES ARE NOW IN THE HANDS OF THE VICE-PRESIDENTS. RENUMBER SECTIONS 8 AND 9 AS SECTION 7 AND 8 RESPECTIVELY.

IT WAS PROPOSED AND PASSED THAT THE CLUB OFFER 3" DISKS TO THE MEMBERSHIP AT THE PRICE OF $5.00/10, PRICE TO BE REEVUALATED AT EACH SUBSEQUENT BULK DISK LIBRARY PURCHASE. THE OBJECT BEING FOR BULK DISK SALES TO PAY FOR ALL LIBRARY DISK PURCHASES.

THE TREASURER PRESENTED HER REPORT ON THE CLUB FINANCES WHICH WERE DISCUSSED IN DETAIL. THE TREASURER WAS DIRECTED TO CONTACT ALL REMAINING PERSONS WHO ISSUED CHECKS TO THE CLUB (VIA THE PREVIOUS MAIL-ORDER LIBRARIAN) WHICH THE BANK HAS REFUSED DUE TO AGE. A $10.00 ONE TIME EXPENSE TO JOIN A ST PUBLIC DOMAIN MEMBERSHIP AND LIST WAS APPROVED BY ALL TO IMPROVE THE ST LIBRARY. THE BBS WAS AUTHORIZED TO GO TO A RINGBACK SYSTEM AND ADD THE JACG MESSAGE MACHINE TO THE SYSTEM ON THE SAME NUMBER TO SAVE COST. EFFECTIVE 02/01/87 ALL TELEPHONE BILLS SUBMITTED TO THE CLUB WITH THE EXCEPTION OF A MONTHLY $10.00 BUDGET FOR THE PRESIDENT, VICE-PRESIDENTS, ADVERTISING MANAGER AND SYSOP ARE NOT AUTHORIZED AND ANY EXCEPTION TO BE MADE BY EXECUTIVE COMMITTEE PRIOR APPROVAL. TO FURTHER IMPROVE THE FINANCIAL STABILITY OF THE CLUB, IT WAS DECIDED TO TEMPORARLY MODIFY THE PRINTING AND MAKEUP OF THE NEWSLETTER. IT WAS VOTED TO ESTABLISH A BUDGET FOR PRESENT AND FUTURE REASONABLE COSTS AND INCOME. DUES WERE VOTED BY ALL TO RAISE $5.00 AS OF THE MAY MEETING, EFFECTIVE AS OF THE MAY MEETING. US, CANADA, MEXICO DUES $25.00 - ALL OTHERS $35.00; $6.00 SURCHARGE FOR 1ST CLASS MAIL REMAINS UNCHANGED. UNTIL 05/06/87 ALL NEW MEMBERSHIPS OR RENEWALS OF ANY LENGTH OF CURRENT MEMBERSHIP WILL BE AT THE OLD RATE. THE MEETING WAS ADJOURNED AT 12:15 AM.

DISK LIBRARIAN'S REPORT

Sam Cory - JACG

SALE....SALE....SALE

ST DISK OF THE MONTH

ST Writer Version 1.7 for only $3.00.
(February meeting price only-price will revert to $5.00 after the meeting)

The Print Shop's Wife

i.e., The Print Shop Companion

Tom Pluck - JACG

In the beginning, God said there would be Print Shops; and then there were Print Shops. And on the second day He created someone to keep his first creation from getting lonely; and then there were Print Shop Companions! And later on, He created light, man, water, and all other kinds of boring stuff like that.

- The Silicon Bible, verses 9 through 21

And what a great creation The P.S. Companion is! It has the following new features: A new Graphics Editor +, a Font Editor, Border Editor, Calendar Creator, Creature Maker, and Tile Magic.

Graphics Editor +: This is an improved (same resolution) version of the Graphics Editor. It has these new features: flood fill, patterns, mirrors, draw lines, rays, box, oval, tile, insert & delete row or column, flip horizontal or vertical, negative, scrolling, UNDO, and text insertion. Those who are familiar with Atariartist and the Koala Pad will understand the flood fill to oval (circle) commands. insertion of a row or column is simply putting an empty horizontal or vertical line in your picture. For example, making a two-line thick line (----) into two separate ones (====). Column insertion is more like this (!) to (!!). Deletion does exactly the reverse. Negative simply makes all white dots black and vice versa. Flip is self explanatory. Scrolling moves your picture as to move a centered oval to the left, up, down, or right. Undo is a neat feature, and is self explanatory. It is compatible with the old Graphic Editor, so you can trade pics with someone who doesn't have P.S. Companion. It draws easier and more smoothly than the original.

Font Editor: This allows you to create new fonts in a variety of sizes. You must make it character by character, so it is painstaking but worth it. You can modify any ready-made font in either The Print Shop or its Companion, as to make work easier.

Border Editor: The border editor allows easy creation of new borders. simple ones can be created in minutes, more complicated ones in about the usual time it takes to draw a good P.S. graphic.

Tile Magic: Is simply a "Screen Magic" (N.B. The Print Shop) for the Graphics Editor +. It creates the same kaleidoscopes, but no text can be inserted. You can jump back to the Graphics Editor + to do that or otherwise fool around with it.

Creature Maker: The Creature Maker lets you take heads, feet, and mid-sections of ten different "animals", and exchange parts. Thus, Elephant-hobo-mice can be created, along with 999 others. You can then hop on down to the Graphics Editor + to fine-tune your "beast."

Calendar: You can create a weekly or monthly calendar with this. Just specify the year, and the week/month that you want, and voila, you can write any message on any or every day on the calendar. A Calendar is set up and created much like a Letterhead, except for the highlighting of dates. You pick a font, picture, and a credit line for the bottom.

Well, I've no complaints for this program, and I recommend it to all Atarians, especially those who have The Print Shop (it HELPS a lot to have The Print Shop!!) Last minute note: This program modifies your Print Shop disk so you can load fonts and borders from other disks when making Signs, Cards, etc. This is the most valued feature of the program and I saved it 'till last merely caused I thought you would expect it.

Have a hoopy new year!
Next month:
The Temple of Apshai Trilogy, by Epyx
-Doctor Dead

January's Meeting --In Brief--

-Reported by Tom Pluck - JACG

The January meeting was new for the JACG, in that the ST sig was held all meeting long in the foyer (the ST wouldn't hook up to the projection TV) and the 8-bits had a meeting in the auditorium. According to ST and 8-bit users, it worked well.

Doug Van Hook demo'd the JACG monthly disk, which had TurboBASIC, other various graphics, etc. programs, and an ST-like "GEM" for the 8-bits. They all looked very well done and we should thank our Atarians in Germany for TurboBASIC.

The "Biggie" was that we had John Jainschigg, Senior Technical Editor of ATARI EXPLORER over. He told us about the new 80-column card for the Atari, by Atari, which he couldn't demonstrate because it wouldn't hook up to the projection TV. It is expected to be available by April, or at least before summer. He also told us of the new "Mega ST's" with up to 8 megs of memory! (Don't use disks, leave all your programs in RAM and leave the computer on!) An IBM compatible Atari is coming out soon, at a very low price, and it should be something different. He answered many questions which are too numerable to mention, so if you didn't come, tough nuggies.

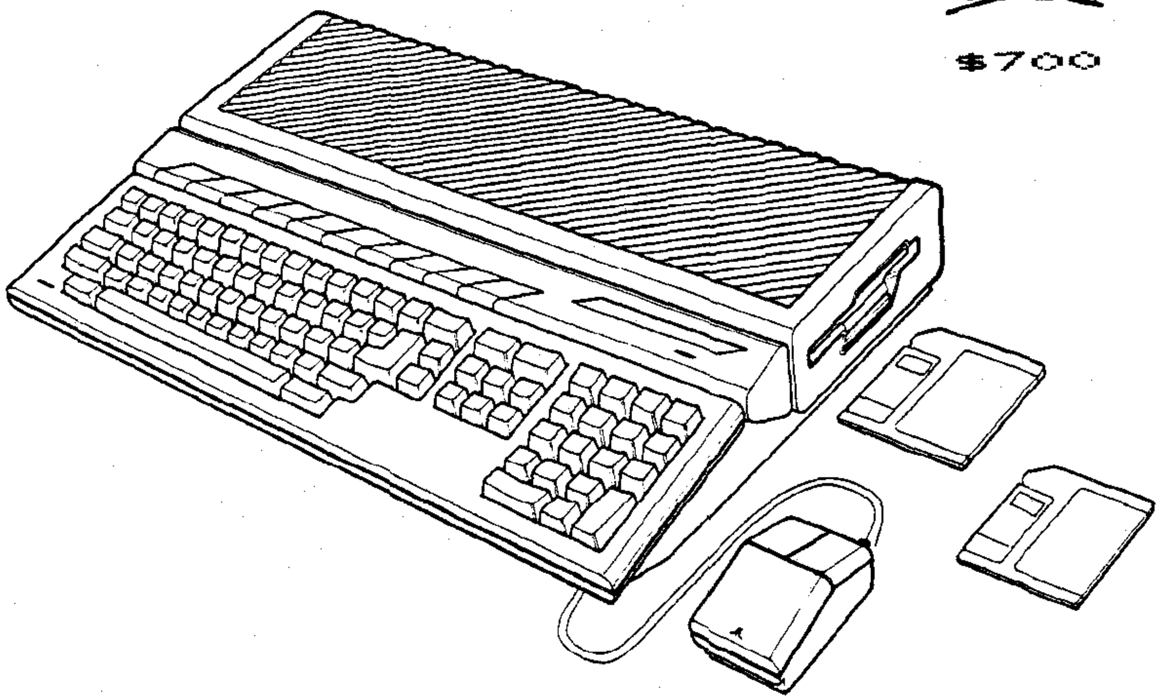
Joe Kennedy demonstrated Super 3-D Plotter II, which was easy to use and powerful. For a finale he rotated a detailed picture of a Star Wars Tie Fighter (Come to the Dark Side of the Force, Luke!) and if it was a little quicker, George Lucas might be in trouble!

JACG Members Call For Special Price !!!

1040ST™

Personal Computer System

The Only One Megabyte Computer for under ~~$1000~~ ~~$800~~ $700



FEATURES:

- Integrated CPU, keyboard, disk drive design.
- *1,048,576 bytes RAM.*
- 196,608 bytes ROM.
- Built-In Operating System (TOS).
- Full-stroke, 94-key intelligent keyboard.
- 3 1/2" double-sided, double-density disk drive, 720 kilobyte storage capacity (formatted).
- Two-button mouse.
- Sound generating capabilities—3 voices from 30 Hz to above audible range.
- 512 colors.
- Selectable graphic resolution:
  640 x 400 monochrome.
  640 x 200 x 4 colors.
  320 x 200 x 16 colors.
- Midi In/Out ports.
- Industry standard parallel interface port.
- *RS232C serial modem port.*
- Floppy disk port (including controller) for 2nd disk drive.
- Hard disk port.
- ROM cartridge port.
- Mouse and joystick ports.

TECHNICAL DATA:

- MC68000 microprocessor; 32-bit internal, 16-bit external architecture.
- Clock speed 8 MHz.

REQUIREMENTS:

ATARI RGB or Monochrome Monitor.

SOFTWARE SPECTRUM
382 Somerset St.
North Plainfield, NJ 07060
(Just 7 blocks south of U.S. 22)

(201) 561 - 8777

MasterCard
VISA
American Express

Store hours: FRI 11 - 6, SAT 10 - 5, TUES - THURS 11 - 7, CLOSED SUN & MON

R. Kovacs - JACG

Ix ATARI NEWSBREAKS
....Mega-ST--The Talk of The Trades

Talk to any Atari user and he'll extol the virtues of his machine.

Read the Atari magazines and you're sure to find high praise for the computer that insures the magazine's existence.

Listen to Commodore chat and check out their publications and you'd see the same support expressed for their PC's.

Let's face it, computer users are a highly subjective lot and are not known for their unbiased opinions.

That's why its nice, as an Atarian, to thumb through some of the electronic news trade magazines this week and read all the nice things they're saying about Atari and the "show" they put on in Las Vegas at CES.

The following excerpts are from the January 26th edition of Electronic Engineering Times.

"Las Vegas, Nev.--Atari Corp. has introduced several product extensions to its 68000-based ST series of computers.

The company also surprised attendees of the recent Consumer Electronics Show here with the debut of two powerful low-end computers capable of running IBM-PC software.

Atari's new Mega ST series includes 1-2-and 4 megabyte versions. Company president Sam Tramiel said he expects at least one Mega ST system, with a new Atari laser printer, to be available for less than $3000 retail this spring.

The Mega ST makes several departures from the original 520 and 1040 keyboard-and-processor machines. The keyboard is now lighter and separate from the compact main processor cabinet. The latter houses the power supply, a 720-kbyte micro-floppy disk drive and a 20-Mbyte Winchester drive, as well as the processor.

The processor boasts a realtime clock and a 10-Mbit/second DMA channel, sufficiently fast to enable the machine to drive a 90,000-dot-per-inch Canon laser engine directly.

Atari expects the I/O capabilities of the Mega ST to steal sales from rival Macintosh and Sun Microsystems computers. For example, the Mega ST-4, which is priced below $2000, features a 320-kbyte ROM operating. That gives it full access to the 4-Mbyte system RAM, and reduces disk I/O by keeping the operating system working at silicon speeds.

Next, Atari's new custom bit-blitter propels the Mega systems to pixel plotting speeds normally found only on much costlier 68000-family workstations and computers. (After initial Mega ST supply needs are met, the company will introduce the blitter graphics processor into the 520 and 1040 ST's, and offer kits for existing owners at a low price.)

The two new low-priced IBM compatibles that Atari showed--$599 and $699--feature a dual-speed 8088 processor, 512 kbytes of system RAM (expandable to 640 kbytes internally), a 360-kbyte floppy disk drive and a high-resolution monochrome monitor.

One unusual attraction of the premium Atari PC is its internal EGA graphics display drive capability. EGA graphics are normally a several-hundred-dollar option on rival personal computers.

The monochrome monitor is capable of showing 720 X 348-pixel and 64 X 350-pixel displays. A full 256 kbytes of RAM is dedicated to screen graphics, freeing up the entire 512 kbytes of system RAM for program operation, RAM disk configuration and the like.

In the EGA color mode, using an optional color CRT, the machine can display up to 16 colors at a time, from a palette of 64. Rival IBM-PC compatibles offer four colors from a 16-color palette.

Shipments start in April."

Enough said!

Ix ZMAG RANDOM NOTES
....News, Rumors, Items............

Compiled by John Nagy
Mid-Michigan Atari Users

EXPRESS! 1030 version 3.0 will not be released. Before you panic, it's only because author of the incredibly popular public domain terminal software, KEITH LEDBETTER, plans to go directly to version 3.1.

The entire line of EXPRESS! programs (for the 850 type HAYES, the 1030/XM301, and the MPP) were to be configured the same for a new version #3.0. The one for the 850 was released in the early fall, to be followed in short order by the 1030 and MPP versions. However, Keith decided to included improved XMODEM and YMODEM routines and call it 3.1, since the DOC for 3.0 was already released. There have been some delays, but expect the new versions at almost any time.

It seems the SUPRA hard drives for the ST are out selling the ATARI brand hard drives by quite a margin. It may be more marketing and cosmetics than price or performance.

The SUPRA is based on a 3 1/2" drive, considerably smaller than the ATARI 5 1/4" unit. Another reason may be that SUPRA has had much more advertising.

Speaking of SUPRA ADVERTISING, we have seen full page ads for their ST HARD DRIVE in MANY club newsletters around the country. MANY. Yet when we have called them about advertising with MID-MICHIGAN ATARI MAGAZINE, they have REPEATEDLY told our reps that "Oh, we DON'T PAY for those, the clubs just run them for their information value." Is this an outright lie?? When pinned on specifics, they back down a bit- "CURRENT NOTES? Oh yeah, we DID advertise there... but that's the only one..." Let me name a dozen others. Or, better, let me name someone who is sure NOT to believe anything else we hear from SUPRA...

ATARI ST COLOR MONITORS are not all created equal. There are at least two distinctly different versions by different manufacturers, and maybe more. And the picture quality is not equal either. It seems the *OLDER monitors are noticeably* sharper. BE AWARE of what you get! Shop around.

THUNDER!, a terriffic word processor accessory for spell checking and more, will NOT WORK with 1ST WORD... sorta. Actually, it will not work in the ACCESSORY mode with REFORMATTED 1ST WORD files, since the extra spaces the formatiing puts in the file mess up THUNDER!'s operation. So, use it in GEM mode, and it should perform fine.

DISK DRIVE PROBLEMS have been reported on the internal drive in the 1040 ST. Although ATARI only rates their drive for 80 sectors, most drives are CAPABLE of accessing more. VIP and other programs force the drive to go beyond the 80th sector, and SOME machines just can't do it. ATARI says it's not their problem, since they published the specs. VIP says get a different drive. Cute.

At the other end of the spectrum: ATARI showed a new CASSETTE drive at the CES... YIKE. Actually, tape is *POPULAR* overseas, where the cost of a disk system is much higher than stateside. One company offers an upgrade called "RAMBIT" (sound familiar?) that is actually for increasing the tape data transfer rate from the normal 600 baud up to 3600 baud. IMAGINE! Tape loads of worthwile sized programs in well under fifteen minutes! It costs 18 pounds.

HEAD CLEANING CONTROVERSY

Always anxious to drum up more business, several video head-cleaning accessory firms held a series of back-stabbing press conferences in which they denounced the other's products. Amaray held a "Video Head Cleaning Forum" in which they attempted to prove that their new wet cleaning system was superior to all other contenders, and invited all the other manufacturers to attend. (Not many took them up on their invitation.) Rival manufacturer Allsop denounced the *demonstration, and claimed* their wet-system, one of the first on the market, was superior.

Meanwhile, 3M claimed that the wet-systems use solvents that *can damage the pinch rollers and* plastic components of VCR's, and insisted their "tape-based" cleaning system was best. When asked about possible excessive headwear due to the abrasiveness of their system, 3M officials insisted that their system was not a true "dry-type" head cleaner per se, and that using their product for 30 seconds was equivalent to about 10 minutes with a conventional tape.

Planting their feet firmly in both camps, audio accessory maker Discwasher now has both wet- and dry-type systems. And Advanced Video Dynamics showed several different wet-cleaning systems which electronically cue the user as to when to apply the cleaning fluid.

This firm also showed a prototype warning device designed to tell the user when to clean the VCR, after every 40 or so hours of use.

We found all of this controversy quite amusing, considering that most VCR manufacturers advise cleaning heads only "when necessary," or after every 500 or so hours of use. We've already seen several instances where novice videophiles have damaged heads by overusing abrasive dry head cleaners, and caution CEFORUM users to avoid making this same mistake.

Ix ZMAG NEWSBREAKERS
....Atari Corp. In Scandanavia.....

It's common knowledge that Atari Corp. has had a firm foothold in the European computer marketplace for a couple of years now. In fact, the ST's were selling overseas long before they hit the U.S. market.

Lennart Olsson, SIX Sysop, picked up this tidbit for us recently on Atari Corp's expansion in the European market.

Here's Lennart's report, which has been condensed from several messages he left to us on CIS.

"Heard a RUMOUR that Atari has formed a daughter company here in Sweden to cover the Scandinavian market. It was said to be so new that they don't have any offices nor phones yet...

EasyPlex
Date: 27-Jan-87 10:16 EST
From: Lennart Olsson [76254,467]
Subj: It was TRUE!!!

Ron,
Mats Toernblad, the product manager for Atari Corp. Scandinavia AB just phoned me. He informed me that they had existed for two weeks.

At the moment there are only three employees, all who had previously worked for the Swedish branch of Commodore.

A FEW WORDS ABOUT THE ST LIBRARY

Charlie Miller-JACG

I'd like to start by explaining that I am by no means a computer expert. I like to participate when I belong to an organization, and helping Sam Cory and Jim Budleman with the ST library is a means to that end. It also serves as a way for me to make more contact with members who may be more fluent in computerese than I, in hopes that some knowledge may rub off! The point I'm trying to make is: don't be afraid to ask me if you are also a fledgling. But don't be surprised if I don't know, maybe we can find the answer together and both be the richer for it. And finally, don't hesitate to let me know what you would like, or to point out something I maybe doing wrong or a better way that I may do it; like I said - this is an opportunity for me to learn.

Now for some news about the ST library. At the last two meetings I was presenting a list of the disk library in the form of a printout of the files found on each disk. Someone commented that filenames don't go too far as to describe the contents. So this month I have attempted to at least add a small description in hopes that it will help to show you what is available and encourage you to purchase some of the club's disks.

Next, I would like to mention that we have 3 new disks in the library that you may not have seen before. The first is a disk that was donated by Art Leyenburger. It is an animated "CAD-3D" (by Tom Hudson) file. If you saw the flying cockatoo demo and were impressed, you should enjoy this disk. Next, I downloaded the latest version of "ST WRITER", ver1.70 and its' documentation and made it available in the library. The final new addition is public domain release by "ATARI" of the "CP/M EMULATOR."

I want to remind you,as mentioned at the January meeting, that I have available "I S TALK" version 2.03 and "THUNDER" version 1.3. for use in updating originals of members only. These latest versions were made available to us by "BATTERIES INCLUDED". To get your programs updated you have several options, Bring me your original at a meeting and I'll return it the following month, bring me your original and a preposted, self-addressed mailer and I will pop it into the mail for you; or, if you prefer, give your original and $1.25 and I will provide the mailer and postage and send you back your updated disk.

A final reminder, or solicitation if you will. Our ST library is small at present and maybe not as diverse as some would like. So if you have any material of your own design our of the public domain that can be verified maybe you would consider donating a disk to the library or perhaps just a single utility or accessory that I can compile with others into a complete disk which can be added to the library.

The Fibonacci Sequence

Tom Pluck - JACG

There are many interesting problems created by mathematicians, which Donald Forbes and Ken Pietrucha have shown through the last twenty or so newsletters, but no one else had dared to venture onto the subject. Best to leave it to the experts, right? Well, I've found an interesting but easy problem, and I will tell you about it and throw in a short demo program to boot.

A Fibonacci sequence is simply a list of numbers like so:

1, 1, 2, 3, 5, 8, 13, 21, 34. . . .

Leonardo Fibonacci created this sequence way back in the 13th century. The first two terms are 1 and 1. Then you simply add two consecutive terms to get the next.

Example: 1st term + 2nd term = 3rd term
1 + 1 = 2
2nd term + 3rd term = 4th term
1 + 2 = 3

And so on.

The routine used is simple; set B & A to 1, then: C=B+A, A=B, & B=C.

```
10 REM ///FIBONACCI SEQUENCE\\\
11 PRINT "TERM #." , "TERM"
20 A = 1
30 B = 1
40 PRINT 1 , A
50 FOR N = 2 TO 20
60 PRINT N , B
70 C = B + A
80 A = B
90 B = C
100 NEXT N
110 END
```

To print out your sequence, substitute LPRINT for PRINT. The program only lists the first 20 numbers because of screen space, but when printed, you can have a lot of terms! That is, change the value after 'TO' in line 50. The highest number of terms I have been able to get is 470, without getting an ERROR- 11 (making a number with over 98 zeros behind it). The final number is at the end of this article, so if you want to find out what it is, stop reading after I tell you where to get a printout of the series.

To see a list, find me (Tom Pluck - Program Director) at the February and/or March meeting. Before the meeting starts I'll be in the auditorium or in the marketplace, otherwise I'll be in the first row of seats in the auditorium.

The Magic Number is:

7.4938642E+97

or 74,938,642 plus 97 zeros.

Bye, now.

PRESIDENTIAL PONDERINGS

Joe Kennedy - JACG

Well, where do we start? There's a lot to cover for you since the last meeting. The most obvious should be the first. Since you're reading this the most obvious is the newsletter. It's not printed but rather photocopied. The reason for this is the state of our treasury. After a year in which we spent more money than we took-in, the deficit spending finally caught up with us. The Executive Board met on the 30th of JAnuary and worked out a budget that will allow us to meet our obligations over the next four months as well as publish the newsletter and maintain the BBS. (Elsewhere in this issue you can find Bob Mulhearn's report on the details of that Executive Board meeting.) This budget will bring the balance back to a reasonable level that will allow the JACG to continue as the top-notch users' group that we all know it is. This must be seen as the positive step it is. With steps such as limiting the expenditures to only those approved by the Board and raising the dues to $25.00 per year effective May 1, the financial cushion should be built-up very quickly.

The second issue addressed at the Board meeting also concerns the future well-being of the JACG. This is the growing number of members who are ST users. A set of proposed changes to the bylaws were approved by the Board to be voted upon at the February meeting. These changes would set-up the offices of Vice President - 8-bit and 16-bit. These officers would be charged with preparing the meeting and its content so that all our members are fully represented in the JACG.

The timing of these new bylaws will work every nicely with this next piece of news. I must resign my position as President at the March meeting. This is precipitated by my transfer to West Germany. It is with mixed feelings that I must do this. I am very pleased to be moving to Germany but I am sad to be leaving the JACG. But this is but another reason that I want to make sure that not only is the JACG solvent but that it thrives over the next three years as I want a users' group to return to after my stint in Germany.

Just a few other notes. First keep in mind that the JACG looks after the reputation of Atari machines no matter where they are. Bob Abrams, a member who has never attended a meeting, has had a letter published in the Family Computing magazine in which he takes the editors of the magazine to task for calling the Atari 8-bit machines "dead". Bob has supplied me with a copy of his letter which will be sent along to Dave for consideration for inclusion in the newsletter. By the way the reason Bob has never attended a meeting?? - he lives in Glendale, California. Tom Pluck has served his apprentice ship and is now preparing the program content for our meetings. It's people like Bob, Tom and your Executive Board giving of their time on days other than the second Saturday morning of the month that will make the JACG what it is. Thank them whenever you can. Better yet join them. Do a demo. Write an article. Volunteer your time to help set or put away the equipment at the meeting. In whatever way you can - GIVE A BIT!!!

Doctor Dead Speaks

About Some Ancient Tomes; (Actually, They're Not That Old)

T. Pluck - JACG

There are a lot of books on the Atari, but only some are good and yet fewer are excellent. I have five books to do a mini-review on each, and but one is bad, one is excellent, and the rest are good with better or worse tendencies. Here they are; The excellent one is a book that everyone should have!

Free Software For Your Atari, by David & Dorothy Heller. This is extremely valuable to beginners. It explains modem operation, users groups, and a multitude of info of which the title implies. This is the "excellent" book. It may seem outdated, but it is still a prime source of valuable information.

The rest of the books are in a descending order of quality.

Things To Do With Your Atari Computer, by Jerry Willis, Merl Miller, and Nancy Morrice. This is simply a whole bunch of reviews of Atari software. It is outdated, but is useful nonetheless. The authors write in an easy to relate to style and tells the truth about each program. I use it quite often.

Atari For the Beginning Beginner, by Tom and Judy Chamberlain. A more fitting title would be Atari For the Absolute Novice. It is okay for beginners, but it is very outdated (the only DOS it tells you about is DOS I) and silly. Even five year olds I know have said it is silly. We're talking jokes on the mentality level of the average potato, here.

Home Applications and Games For the Atari Computer, by Timothy Banse. 31 programs of varying quality and usefulness that cost $14.95. Save an extra 10 bucks and subscribe to Antic! Almost half of these programs are mediocre things found in magazines seven years ago. 3 are good.

The final; The bad; The

Basic Fun With Graphics the Atari Way, by Magaret Zuanich and Susan Drake Lipscomb. A bunch of text-graphics, with some Graphics 8 and low-grade animation. There is one good program in it. It has a variety of color pictures in it, but they are not really computer-created and some look to good to be made on an ST. This product should be avoided. In the beginning of the book they treat you like a complete novice, and by the end they use 10th grade Plane Geometry terms (that is not an exaggeration.)

Well, read the good books, avoid the bad. This is Doctor Dead signing off.

S T - S I G

Donald Forbes - JACG

JOE KENNEDY: It is now 11:50 and the December meeting is over. All ST - SIG members including Don Ursem will gather at the front. Have a Merry Xmas. See you all in January.

DON URSEM: If you will all be seated in the front row we will get started. I see that we have about a dozen members present, and I suppose the holidays kept some of the others away.

I have here a list of members and a questionnaire that you can return at the end of the meeting. The names are:

Dan Bair	245-1932	Roselle Pk
Alan Bergeron	729-7848	Sparta
Jim Budelman	735-7723	Clinton
Dan Collins	445-5561	Jersey Cty
Wayne Cree	671-8474	Middletown
Gordon Hampton	388-4326	Colonia
Eric Jacoves	625-1768	Rockaway
Scott Jacoves	625-1768	Rockaway
Joe Kazimer	494-0271	Edison
Len Labriska	328-0541	Randolph
Matt Marshall	852-0741	Hacketstwn
Charles Miller	469-6190	So Bnd Brk
Steve Newfield	828-4359	Somerset
Mark Schwarz	663-1077	Lk Hopatcg
Jeff Stevens	356-1692	Middlesex
Don Ursem	895-2522	Randolph
Bob Zindle	471-0271	Edison

What do you have?
520(512k);520(1Meg);1040;Color;B/W
Disks SS; disks DS; printer type;
Devlprs pkg C(Alcyon Megamax Lattice MWilliams)
Pascal;Modula2;CShell;MTCShell;Other
Sprdsheet(which);WP(which);DB(which)
Owned ST _ months;Most used for:
Learning;Graphics;WP et al;
Kid Educ;Games;Developer
Latest purchase;Next purchase
What having difficulty with;
How do you want SIG to spend its
time each meeting (topics)?
Rip here, fill out, and we
will compare notes.

Here is a space-age game that I would like to demonstrate on the large screen. It is called Deep Space from Psygnosis and sells for about $44. I wanted to show this at 11:30 towards the end of the meeting but we had trouble with the large-screen projector. We fixed it and here is the game. This is a fun game and I enjoy it. I think you will be impressed by the great color and graphics.

Here is something else that I would like to show you. It is the first speech synthesizer for the ST and it is all done in software. The program lets you present a story that can be spoken in a male or female voice. I think it does a good job of turning written English into spoken English.

How many of you are interested in games?

(Voice: I think games are a waste of time. They are fun for about an hour or so, but then they get boring.)

Do you have any questions?

(Voice: What about IBM compatibility for the ST? There is a lot of MS/DOS public domain software out there.)

There is now a $60 third party software package available at Gemini that emulates MS/DOS 3.2. It does not let you run Lotus 1-2-3 but this feature has been promised for the next release. Have not heard any more about the hardware compatibility box, but it is not needed if one has software compatibility.

(Voice: The ST is the new technology, the wave of the future, and there is a lot of software out on the flea-market tables. Why don't we devote the last half of the JACG meeting to the ST?.)

Most of the members and the executive committee are fans of the Atari 800. We proposed to have the ST-SIG meeting from 8:00 to 9:00 but that would have cut into the flea market and the question & answer period. We proposed to hold the ST-SIG meeting in the lobby during the regular meeting, although that prevents the rest of the members from watching the demos. We proposed to hold the SIG meeting at 11:30 today, but the meeting ran late and, as you see, it was noon before we got started.

If you think the SIG meeting is important and should begin at 11:30 by all means talk to Joe Kennedy about it.

We propose to hold the January meeting in the lobby during the latter part of the regular meeting, at about 10:30. I need to have (1) your ideas for topics for our subsequent meetings, (2) that we have participants other than myself, and (3) that we have volunteers for demos and discussions. Call me about your ideas (my phone is still 895-2522 although my street address in Randolph is now 65 Musica Ave instead of 37 Clover Lane). It is close to 12:30 and they are about to throw us out. Hope to see all of you next month.

An Idiot's Adventure in Troubleshooting

by Werner Heck - JACG

Every month new improved hardware or software hits the market. Some of my technologically advanced Atari friends have spent thousands of dollars on "improvements" and "upgrades" over the course of several years. I was under the impression that one of my friends had everything that was ever manufactured for the Atari, but I was surprised to learn that despite his investment in 6 disk drives (including a "Happy" enhanced 810 drive), modems, 850 interface, light pens, voice boxes, printer, etc., he was still using a TV as a computer monitor.

I, on the other hand, hadn't spent nearly as much on harware as he had, but I was getting fed up with my TV display. The TV display was alright for playing video games, but over a period of two years I found myself playing fewer and fewer games, and looking more and more at text on the screen. In fact, I was studying the text on the screen. With text on the screen, I couldn't easily distinguish h's from b's or s's from a's. In some cases, I couldn't even see the left-most one or two characters on menu screens.

I had been itching for a monitor ever since I saw another friend's Teknika MJ10 monitor display. The colors were bright, the outlines were sharp, the text was crisp. Even in a graphics mode that was equivalent to an 80 column text mode, the letters were easily distinguishable. I was impressed!

Color monitors don't come cheap, and my friend had paid $170 for the monitor. But before I could spend that kind of money, I had to think about it. After all, I was only an occasional computer user. Despite the poor TV display, I supposed I could put up with it for 8-10 hours per week.

After nine months of thinking about getting a monitor, I decided to get one. I would kill two birds with one stone. I would give the TV that I had been using to my daughter for Christmas, and I would be my own Santa by getting the Teknika MJ10 monitor for myself.

I promptly executed my plan. But to my surprise and dismay, the two or three mail order houses I contacted no longer had the Teknika MJ10 available. After contacting two local stores, I found one store that had one monitor left. Delighted, I bought it, brought it home, and hooked it up. The display was beautiful! A whole new, wonderful world of color and clarity opened up to me.

One evening about two weeks later, no sooner had I turned on the XL with the DOS disk in the drive, I was staring at a flickering, rolling picture on my monitor. I was devastated. I had agonized months over whether to get this particular monitor, and now this was my reward? Even though it was well within the warranty period, I knew when I bought the monitor that it was the last one in the store and that they were being discontinued. So if I did take it back, I would have to get a different brand, a brand I was certain to be unhappy with.

But I caught myself jumping to conclusions. How did I know it was the monitor? Maybe it was the disk drive. Or maybe it was just a fluke!

Right away I rebooted the disk: it wasn't a fluke - same results. But I noticed that the disk drive busy light didn't go out after the usual time after boot up. "Aha, it's the disk drive", I thought. But then I caught myself again: How do I know it's not just the disk? Maybe the kids touched it and ruined it!

I quickly booted up a second disk, then a third, but the same garbage always came up on the monitor. Then I did what came naturally at the moment: I sulked.

After sulking around the house for a while, I resigned myself to spending $130 for another disk drive, an expense I didn't need before Christmas. Repairing the drive would be about half as much, but I already had it repaired two years before. Why sink more money into it?

Out of this despair and resignation popped another question: How did I know that the disk drive problem wasn't caused by the 800XL itself? Would I get a flickering screen if I turned the disk drive off and turned on only the computer?

The more I thought about it, the clearer it became that this would be the revealing test. If the screen still flickered, the disk drive is not causing it; it would have to be the monitor or the computer.

I sat in front of the computer and turned it on. Even though the disk drive was off, the screen flickered just as before. So it had to be either the monitor or computer. I could have hooked the computer up to the TV I had been using before I got the monitor, but I had put the TV in the Teknika packing box and already had wrapped it up to give to my daughter for Christmas. There was more I could have done to pinpoint the problem that night but I had had enough.

The next day I told my problems to Joe, a JACG colleague at the office. Joe immediately asked me about the 800XL power supply, and I replied that the "power on" light shone brightly throughout the testing. He said that eliminates the power supply as the culprit.

When I had finished talking with him, I remembered that I had bought a spare home-made 800XL power supply 1-2 years before. Why not try the spare power supply, even though it was a long shot? It would be less work than hooking up the computer to a TV in another part of the house.

When I got home, I whipped out the spare power supply and powered up the computer. To my surprise, the screen came up normally. Just to make sure it wasn't luck, I rebooted with the disk drive on; the screen still looked great. The problem was solved.

The story should have ended there but it didn't.

The next day when I returned to the office, I told Joe of my success the night before. He was skeptical that the power supply was the culprit, because I had told him the "power on" light was on throughout the trouble. Anxious to convince him beyond a doubt of my trouble shooting prowess, I promised that I would bring him the bad power supply and he could test it himself on his own 800XL computer. He said it really wasn't necessary to do that but he would test it just out of curiousity.

I brought Joe the power supply and he tested it on his 800XL computer, which he bought a few months after I had bought mine in 1984. After he tested it he called me at home to inform me of the results: yes! it was a bad power supply, and, by the way, his computer no longer works. "How could that be?", I asked. Joe, who was no stranger to troubleshooting himself, had the answer. "The output from your power supply was 7 amps instead of 5 amps." Somewhat defensively I asked him why the power supply destroyed his computer and not mine - they were both 800XL's bought months apart. He didn't know.

When I saw Joe again the next day, he had resigned himself to replacing his burned out computer. But as a long shot, he was going to ask Gordon, the local Atari hardware/software guru who also works with us, to diagnose the problem and fix it. Gordon was happy to oblige, but he was a busy man. Joe would have to wait a while, but he also had to contend with his two young sons who were restless without their toy.

Just as Joe was caving in to his children's pestering for a replacement computer, he found out from Gordon that his computer was fixed. Apparently, my defunct power supply had burned about $3 worth of chips in Joe's machine. At no extra charge or obligation, Gordon also replaced a few other chips that were running a little hot. The computer worked just fine after that, and everybody was happy.

The ups and downs of the entire episode were enlightening. (Joe says he could have done without the enlightenment!) For veteran Atari hardware hackers out there, the problem could have been coolly diagnosed in a few minutes, but then you wouldn't have had this tale of trouble shooting by an idiot.

TREASURER'S REPORT 1986

Shree Vandenberg
Treasurer - JACG

INCOME STATEMENT

Balance on Hand...............5711.00

Income:
Mem. Dues............5514.00
Newsletter Ads.......1690.00
Newsletter Sales.......57.00
Fund Raising Sales...1357.00
8-Bit Disk Library...1866.00
ST Library Sales.......35.00

Total Income........10519.00

Expenses:
Newsletter Printing..8962.76
Newsletter Mailing...2326.33
8-Bit Library.........306.00
ST Library............508.48
Equipment Purchases...311.70
Equipment Maintenance.350.00
Bulletin Board.........64.09
Telephone............1288.96
Stationery/Supplies..1477.43
Postage...............746.20
Travel.................30.00
Miscellaneous.........341.66

Total Expenses......16713.61

TOTAL NET LOSS -6194.61

Total Ending Balance on Hand..-483.61

Above covers 1/1/86 thru 12/31/86 time frame.

TREASURER'S REPORT - 1/87

S. Vandenberg -Treasurer- JACG

Starting Balance 1/1/87	$ -483.61
Income	2009.00
Expenses	1288.59
Ending Balance 1/31/87	$ 235.80

CALCULUS DEMON

Donald Forbes - JACG

If you were stranded on a desert island and could have one Atari program, which one would you pick?

My choice (and I have thought it over many times) would be "Calculus Demon" by Dr. David R. Stoutemyer, a 1982 program from the Atari Program Exchange (APX-20155) published by The Soft Warehouse, P. O. Box 11174, Honolulu, Hawaii, 96828. The author was a professor at the University of Hawaii, living at 3274 A Lower Rd, Honolulu, HI 96822.

What the program does, in short, is let you solve about half of the problems in an ordinary calculus text.

This may not sound very exciting, but it demonstrates, in effect, that the Atari 800 gave you "power without the price" long before the days when Jack Tramiel and his sons revitalized the moribund Atari.

It was astonishing, to me a least, that a simple BASIC program that printed out in less than a dozen pages would provide the capabilities that otherwise would require a modern artificial intelligence program running on a large mainframe computer.

The leading mathematical expert system is a program called MACSYMA that sells for thousands of dollars. Here is a description, from "Designing and Programming Personal Expert Systems" by Carl Townsend and Dennis Feucht (Tab Books, 1986): "Numerical methods are commonly used to perform integration of functions or solve equations. A program written in LISP called MACSYMA performs the same mathematical operations, but does so in the way taught in math courses. It identifies forms of algebraic expressions and determines the rules of integration that can be applied to those expressions. Only recently has symbolic computation begun to be used commercially. LISP machines are now being sold by several companies and compete with programs like MACSYMA."

CALCULUS DEMON, according to the author, was "the third program in a series that includes ALGICALC and POLYCALC, and provides a comprehensive tool for automatically deriving symbolic partial derivatives and indefinite integrals of expressions. Individually, the programs offer a quick way to perform various kinds of operations in symbolic algebra and calculus. Collectively, they constitute a complete computational package."

"CALCULUS DEMON is best at calculus, although it does contain some algebraic capabilities. It also offers some trigonometric, logarithmic, and exponential simplification. The algebraic expressions CALCULUS DEMON can handle include trigonometric, inverse trigonometric, logarithmic, and exponential functions. The program also provides various automatic and optional mathematical transformations to simplify results or aid integration. Unlike most programming languages, which can evaluate an expression only if all variables have numerical values, CALCULUS DEMON can do true non-numeric operations."

Stoutemyer's main claim to fame was authorship in 1971 while at the University of Hawaii of the book "PL/I Programming for Engineering and Science," one of the first in the field, and my favorite of the dozen or so PL/I books I own. Unfortunately, I did not find time to test out all the examples on my employer's IBM mainframe. Professor Stoutemyer later made a name for himself in symbolic computation.

I listed the program on the printer and found that it consists of about eight pages of sophisticated BASIC programming. One day, I promised myself, I will translate it into Forth or MS/DOS BASIC or Pascal so that it will run a little faster -- but I have yet to do so.

Anyone who has fought their way through an elementary calculus book in college will appreciate the sophistication and usefulness of the program.

CALCULUS DEMON starts out with a HELP menu that displays eleven topics:

```
1: Expressions       7: Compound Lines
2: Algebraic Expand  8: Quoting
3: Functions         9: Re-evaluation
4: More Expansion   10: Derivative
5: Assignments      11: Integral
6: Non-display
Enter a topic number followed by a question mark
```

The program will tackle the tough questions. Here are some of the results of the easy examples from the HELP submenus (the first line is the question, and the second the response):

```
1: Expressions
3 X^2 Y + 5(XYX - 7)
8 X^2 Y - 35
2: Algebraic Expand
(X+Y)^2
XY + X^2 + Y^2
3: Functions
EXP LOG X
X
4: More Expansion
LOG (XY/Z)
LOG X + LOG Y - LOG Z
5: Assignments
P = 5(X+Y+Z)
5 X + 5 Y + 5 Z
```

6: Non-display
[does not display first value]
P = S+1; P^3
(S + 1)^3
7: Compound Lines
P = R+1; Q = L+P; Q^2
(L + R + 1)^2
8: Quoting [use ' to clear values]
P = 'P; P^2
P^2
9: Re-Evaluation
[use @ to display new value
of 9 instead of (H + 1)^2]
H = 'H; P=H+1; H=2; P^2 @
9
10: Derivative
[% specifies variable]
BX^3 + CX^2 % X
3 B X^2 + 2 C
11: Integral
[reverses answer in 10]
[$ specifies variable]
3BX^2 + 2CX $ X
B X^3 + C X^2

If you ever plan to be shipwrecked on a desert island, remember at the last minute to reach for your calculus text and a copy of CALCULUS DEMON. By the time you are rescued, you will be an authority on symbolic computation and mathematical expert systems.

Letter to the Editor

Dear Editor,

I noticed an error in the "Hot News" column in your January, 1987 issue. Paragraph 3 states that the ATARI 2600 has 8K of memory. It originally came out with 4K. The StarPath Supercharger gave the 2600 a capacity of 8K, and other companies used ram chips in their carts to give switch banking ability for using 8K.

Here's a mini-review of Star Raiders II. It has great graphics, sound and game play, but has one major flaw. Once you figure the game out (play it a few times), you can't lose. The fun is in learning how to win, but once you do, the game will sit and collect dust after that.

Sincerely,
/s/
Paul J. Kowalski - JACG

Blue Team Bridge
A Review

by
Hal Groendyk

If space permitted, the title of this article would have been, "ANTIC 'Scores' Big With Blue Team Bridge." It has been said that bridge ". . .is the card game of royalty and society." Actually, bridge is a card game that is similar to chess in that it can be played by anyone who enjoys a game that provides intellectual stimulation and requires concentration and mental acumen.

Blue Team Bridge, by Walt Huber, is published by ANTIC SOFTWARE, and can be purchased by mail from THE CATALOG and is an excellent buy at $15.95. It is also available at Gemini Enterprises in Cedar Knolls for a few dollars less.

At times, many of us have been disappointed with simulation software that promises much but delivers somewhat less. Not so with Blue Team Bridge. Technically and graphically, I would have to speak of it only in superlatives. The sights, sounds and mechanics of bridge are expertly presented. The game comes with two disks; a main program disk and another which provides both detailed rules of play and fine supporting documentation, which can be printed either to your screen or printer.

Often, simulation disks are either too basic or too technically advanced to be played by a novice. Blue Team Bridge is about as realistic as can be, and it can be enjoyed equally by either the amateur or the "pro." The only things that are missing are "breathing souls" and, for anyone who has played bridge knows, sometimes that could be a blessing. All bridge players have, at one time or another, wished that it was possible to have an "instant replay" capability in order to see other ways a particularly interesting or difficult hand could have been bid and played. Not only does this program provide that option, but an additional one that allows the "saving to disk" of a hand for replay or future use.

Blue Team Bridge is an ideal game for either a beginner or a tournament level player. It is an excellent way in which to improve one's bidding skills and, for the more serious player, sharpen convention bidding techniques.

Blue Team Bridge is written for the Atari 400/800, XL/XE series with at least 48K and requires a joystick. It can be played by one to four players. Scoring is handled very well by the program. For those who do not play bridge, consider it an excellent gift for someone who does.

- TRY IT--I'M SURE YOU'LL LIKE IT -

Remember, receiving the JACG Newsletter is just one of the many benefits of being a member of JACG.

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NEW TO THE ATARI?

NEED A LITTLE HELP?

PRESS CTRL-CLEAR

SYSTEM RESET TO REBOOT

#@%&#!

BOOT ERROR...

SET OPTIONS NOW

MAYBE A JACG BIG BROTHER CAN HELP

GIVE US A CALL 201-469-6190

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Take a moment and look at your mailing label on a recent issue of the JACG newsletter. Check the bottom right hand corner following "Last Issue:". This is the month/year when your membership expires. Try to renew at least one month early. This helps us keep our book keeping in order and avoids your missing any issues of the newsletter.

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1. Fill out a membership renewal form in the front lobby before our monthly meeting and present it with $20 (in cash or check) to the Treasurer. Add $6 for first class mailing of the newsletter.

2. Copy the information on your mailing label and send, with your remittance, to:

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February 1987

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